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| 09/868,628 | 06/26/2001 | Narinobu Kagami | 209081US0PCT | 4073 |
| 22850 | 7590 | 05/04/2006 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | NGUYEN, CAM N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1754 | |

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,628

Applicant(s)

KAGAMI ET AL.

Examiner

Cam N. Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/09/05 (an amendment/response).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 6-8, 35-38 and 60-67 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7-8, 36-38, & 60-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicants' amendment and remarks, filed February 09, 2006, has been made of record and entered. Claim 1 has been amended. Claims 2-3, 5, 9-34, & 39-59 have been canceled. Claims 60-67 have been added.

Claims 1, 4, 6-8, 35-38, & 60-67 are currently pending.

2. Claims 6 & 35 are depending upon canceled claims 2 & 3, respectively. Thus, they have been withdrawn from further consideration.

Claim Rejections - 35 USC § 112 (Second Paragraph)

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 7-8, & 60-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 60, & 64, the phrase "a refractory alumina_carrier" is unclear as to what applicants intend. Thus, it renders the claim vague and indefinite.

Claim Rejections - 35 USC § 102(b)/103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4, 7-8, 36-38, & 60-67 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yanik et al., "hereinafter Yanik", (US Pat. 4,080,286).

Yanik discloses a catalyst substantially free of phosphates and consisting essentially of a hydrogenating metal selected from Group VI-B and a hydrogenating metal selected from Group VIII, both hydrogenating metals being in a sulfided form, supported on a non-zeolitic refractory oxide carrier and promoted with from about 1 to about 10 weight percent of a Group IV-B metal by the addition of the Group IV metal to said carrier after calcination of said carrier; the improvement which comprises in the preparation of said catalyst the step of adding the titanium to said carrier by contacting

said carrier with an aqueous solution of a titanium salt (see col. 6, claim 1, ln 9-21). Yanik further discloses that the carrier is contacted with the aqueous solution of a titanium salt simultaneously with compositing said Group VI and Group VIII hydrogenating metals with said carrier (see col. 6, claim 9). The non-zeolitic refractory oxide carrier is selected from a group including alumina (see col. 6, claim 10). The heating temperature is 121°C for drying and 538°C for calcining (see col. 4, Example 1). Molybdenum and Nickel are being exemplified for Group VI and Group VIII hydrogenating metals (see col. 4, Example 1).

Regarding claims 1, 60, & 64, applicants claiming "calcining it at a temperature of not higher than 300°C". It is considered the claimed "calcining temperature" is process limitation. While this limitation is not disregarded, it has no bearing on the patentability of the claimed catalyst because it has been held that the product and its method of production are separately determined. While the catalyst disclosed is not made by the same process, the catalyst made is the same as applicants' claimed catalyst. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Brown*, 173 USPQ 688, 688 (CCPA 1977); *In re Fessman*, 180 USPQ 324, 326 (CCPA 1977). See also *MPEP* 2113.

Regarding claims 1, 4, 60, & 64, it is considered the specific titanium compound being claimed is a process limitation, and it has no bearing on the patentability of the claimed catalyst. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Brown*, 173 USPQ 688, 688 (CCPA 1977); *In re Fessman*, 180 USPQ 324, 326 (CCPA 1977). See also *MPEP* 2113.

Regarding claims 36, 61, & 65, the claimed titanium range is met by the teaching of the reference since the disclosed range fall within the claimed range (see above).

Regarding claims 7, 37, 62, & 66, Mo and Ni are disclosed by the reference, thus meets the claim (see above).

Regarding claims 8, 38, 63, & 67, since Yanik teaches that the catalyst contains phosphates in the amount of less than about 0.1% as contamination (see Yanik at col. 1, ln 45-50), thus provides for the catalyst carries phosphorus, thus meets the claim.

Regarding claim 60, it is considered the claimed properties is inherently possessed by the hydrogenation catalyst disclosed by Yanik since the catalyst is the same as being claimed.

Regarding claim 64, the limitation on "the hydrogenation catalyst ... is substantially free of chloride" is noted. It is considered the claim is met by the reference since the reference does not disclose that the catalyst contains chloride. Even if there is some chloride contains in the disclosed catalyst, it is considered the claim is still met by the teaching of the reference because "substantially free" is not "free".

Response to Applicants' Arguments

7. Applicants' response, filed on February 09, 2006, to the last office action dated 08/09/05 has been fully reconsidered, but not deemed persuasive for the same reasons as set forth in previous office action and in view of the new ground of rejection(s) above.

Further, applicants' urging regarding the claimed calcining temperature is noted. It is not found persuasive because it is a process limitation. While the Yanik reference

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does not disclose the same calcining temperature, it is obvious to one having the ordinary skill in the art at the time the invention was made to optimize such calcining temperature to result in an effective catalyst, because of *In re Boesch*.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

9. Claims 1, 4, 6-8, 35-38, & 60-67 are pending in the application. Claims 1, 4, 7-8, 36-38, & 60-67 are rejected. Claims 6 & 35 are withdrawn from consideration. No claims are allowed.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn
May 01, 2006


CAM N. NGUYEN
PRIMARY EXAMINER

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